

PATENT SPECIFICATION

1,070,409

DRAWINGS ATTACHED.

1,070,409



Date of filing Complete Specification: June 17, 1965.

Application Date: June 24, 1964. No. 26077/64.

Complete Specification Published: June 1, 1967.

© Crown Copyright 1967.

Index at Acceptance:—A6 D13A.

Int. Cl.:—A 63 b 69/36.

COMPLETE SPECIFICATION.

An Improved Golf Practising Device.

We, ROBERT DUNCAN, and GEORGE DUNCAN, both British Subjects, and both of 255 Main Street, Cambuslang, Glasgow, Scotland, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention has reference to devices employing a captive ball whereby golfers can practice driving and has for its object to provide a device by which the golfer will have an indication of the length of his drive if he had used a non-captive ball and also be given an indication of the direction of the drive.

According to the present invention a device whereby golfers can practice driving comprises an upright supporting member, 20 an arm supported by said member and projecting outwardly therefrom, a cord suspended from said arm a ball secured to the cord, and a tassel secured to the end of the cord and extending downwards from the ball, the construction being such that, when the end is hanging vertically the tassel bears on the ground or on a mat or base and damps swinging of the ball and when a golfer hits the ball, as he would do in driving a non-captive golf ball, the cord winds on the supporting arm, the number of convolutions of the cord and the direction in which the convolutions are formed denoting the length and direction in which the ball would 30 have travelled if it was a non-captive golf ball.

The said upright may be mounted on a base plate or it may be such that the foot thereof is adapted to be forced into the ground.

In preference the upright is formed of two rods mounted vertically on a base plate, the rods at their upper ends being bent to lie

adjacent to each other and to form or support the arm from which the cord is suspended.

The arm may be in the form of a tubular rod having an aperture in the wall thereof in which is fitted a rubber like bush through which the cord is threaded, the bush frictionally gripping the cord but permitting it to be drawn therethrough to adjust the length of cord suspended from the arm.

Preferred embodiments will now be described with reference to the accompanying drawings wherein:—

Figure 1 is an elevation of one construction of device in accordance with the invention;

Figure 2 is a plan view thereof;

Figure 3 is an end view thereof;

Figures 4, 5 and 6 are a side view of the arm with cord coiled thereon. Figure 4 showing the convolutions as they would appear if the ball had been struck to travel in a path parallel to the side of the base, Figure 5 showing the convolutions as would appear if the ball was struck to travel in a path inclined to the right with respect to the first mentioned path and Figure 6 showing the convolutions as they would appear if the ball was struck to travel in a path inclined to the left and

Figures 7, 8 and 9 are perspective views each showing a further construction of device in accordance with the invention.

The device shown in Figures 1 to 3 is provided with a base 10 on which is mounted two upright hollow posts 11 and 12. Fitted in each post is a rod 13 which is bent at right angles as at 14 and again bent to form two parallel arms 15 which extend adjacent to each other. Said parallel ends, which extend over the base in a plane parallel thereto, are encircled by a tube 16

[Price 4s. 6d.]

and are clamped therein by a pinch screw 17 screwed into the tube.

Welded to the tube 16 is a tubular rod 18 having in the wall thereof an aperture 5 in which is fitted a rubber like bush 19. Threaded through the rod 18 and through the bush is a cord 20 which hangs downwards and at its lower end passes diametrically through a ball 21, the extremity of the cord being secured to a tassel 22.

The ball is preferably in the form of a light slotted spherical shell, such balls being well known to golfers.

On the base directly below the ball is a piece of carpet material 23.

The rods 13 are telescoped within the tubular posts 11 and 12 and are secured in their vertically adjusted position by means of pinch screws 24.

In using the device the rods 13 are vertically adjusted so that rod 18 is at any desired height above the base 10.

The cord is then drawn through the bush 19 to support the ball in such a position that the tassel 22 bears on the carpet material 23 and thereby prevents the ball swinging when being addressed by the golfer.

The golfer then addresses the ball as he would do a golf ball at the tee, that is he adopts a stance to enable him to drive the ball in the direction indicated by the arrow 'A' in Figure 2.

When he hits the ball the cord will coil around the tubular rod 18, and the number of convolutions will give an indication of the distance the ball would have travelled if the ball was a non-captive conventional golf ball.

If the drive is in the direction of arrow 'A' the convolutions will be close together, or some may be superimposed on others. This is shown in Figure 4.

Should, however, the drive be faulty such that, if it was a non-captive golf ball, it would travel somewhat to the right of the path indicated by the arrow 'A' the convolutions of the cord will extend to the right of the point of attachment of the cord to the rod 18 as viewed in the direction of the arrow. This is shown in Figure 5. If the drive was such that a non-captive golf ball would have travelled to the left of the path indicated by the arrow the convolutions would be as shown in Figure 6.

Thus after each time the ball is hit the golfer, examining the convolutions on the rod 18, can assess the drive he would have had if the ball was not a captive ball and was a conventional golf ball. He is therefore in a position to criticise his efforts and to profit therefrom.

The device shown in Figure 7 is formed by a stout wire or strip metal frame bent to form two upright legs 25 bent at right angles 65 at their lower ends as at 26 to form feet

interconnected by a cross member 27 and at their upper ends bent inwardly towards each other as at 28 and then bent to form two closely adjacent limbs 29 which may be said to constitute a rod with central gap. Such rod extends horizontally over a base formed by a length of canvas 30 stretched over the two feet 26.

The cord 20 is inserted between the two limbs so that it is suspended from a pin 31 inserted through the limbs and is then extended backwards to a short spindle 32 extending through the limbs, the cord being laced around the protruding ends of the spindle.

The ball 21 and tassell 22 is suspended by the cord 20 and the device is used as previously described.

The construction shown in Figure 8 is similar to that shown in Figure 7 but differs therefrom in that the legs 25 are not bent to form feet but are made somewhat longer so that they can be forced into the ground.

The device shown in Figure 9 is of a simpler construction in that it consists of a base 33, a single upright 34 supported by the base, and an arm 35 secured to the upright and over hanging the base, the cord 36, ball 37 and tassel 38 being suspended from the said arm. This device is also used exactly as the above described.

WHAT WE CLAIM IS :-

1. A device whereby golfers can practice driving comprising an upright supporting member, an arm supported by said member and projecting outwardly therefrom, a cord suspended from said arm, a ball secured to the cord, and a tassel secured to the end of the cord and extending downwards from the ball, the construction being such that when the cord is hanging vertically the tassel bears on the ground or on a mat or base and damps swinging of the ball and when a golfer hits the ball, as he would do in driving a non-captive golf ball, the cord winds on the supporting arm, the number of convolutions of the cord and the direction in which the convolutions are formed denoting the length and direction in which the ball would have travelled if it was a non-captive golf ball.

2. A device as claimed in Claim 1 wherein the upright is mounted on a base plate.

3. A device as claimed in Claim 1 wherein the foot thereof is adapted to be forced into the ground.

4. A device as claimed in Claim 2 wherein the upright supporting member is formed of two rods mounted vertically on the base plate, the rods at their upper ends being bent to lie adjacent to each other and to form or support the arm from which the cord is suspended.

5. A device as claimed in Claim 1 wherein the upright supporting member is formed by two legs bent at their lower ends to form feet and in which a canvas mat is stretched between the feet.

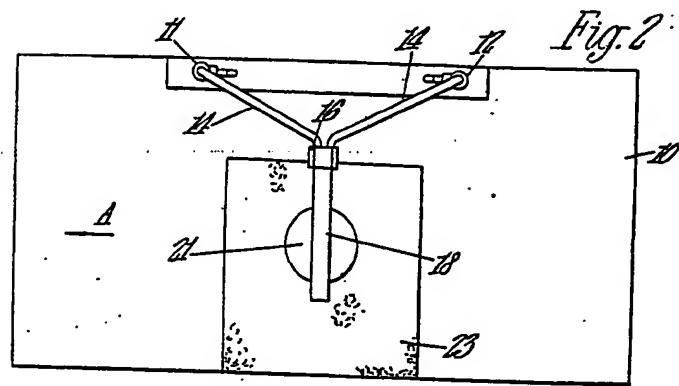
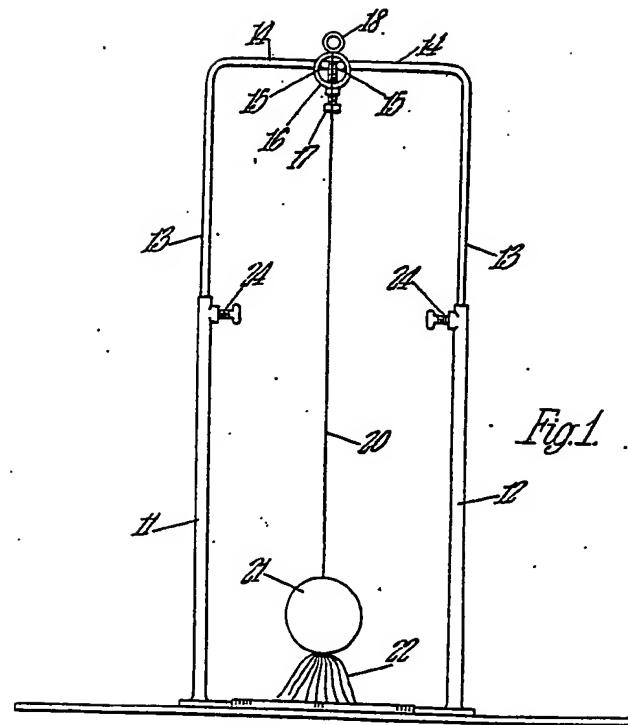
6. A device as claimed in any of the preceding claims wherein the arm consists of a tubular rod having an aperture in the wall thereof in which is fitted a rubber-like bush through which the cord is threaded, the bush frictionally gripping the cord but permitting it to be drawn therethrough to adjust the length of cord suspended from the arm.

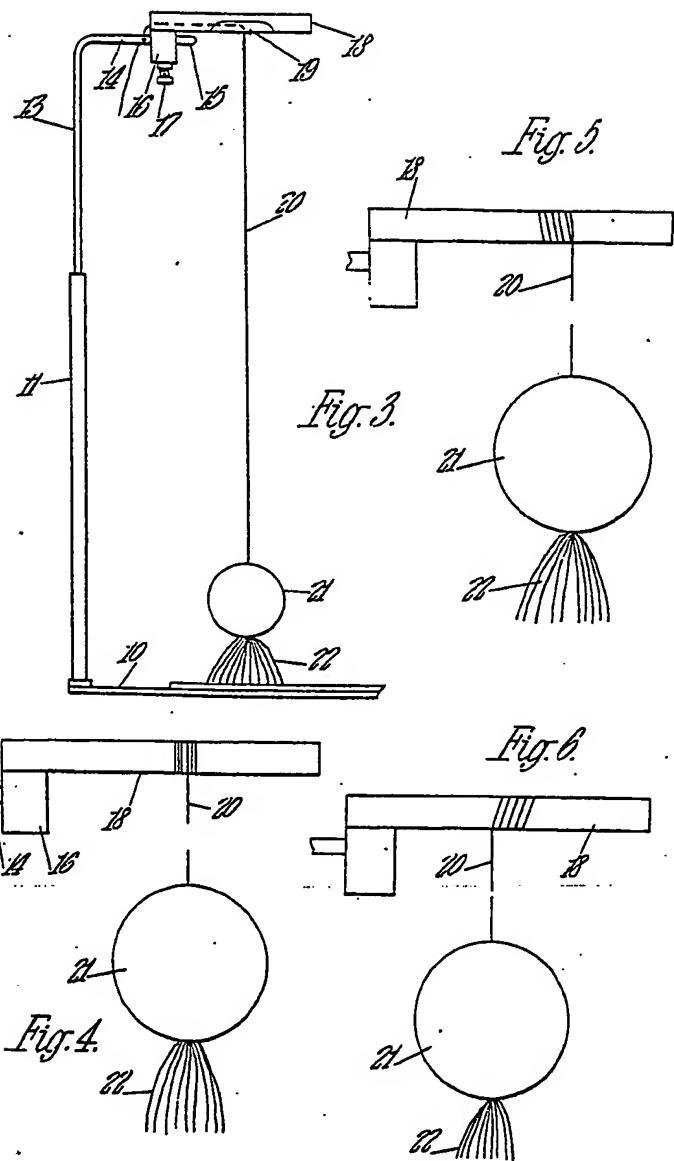
7. A device for the use of golfers in practicing driving substantially as herein described and shown in Figures 1 to 3, or in any of the Figures 7, 8 or 9 of the accompanying drawings.

MARKS & CLERK,
Chartered Patent Agents,
Agents for the Applicants.

Abingdon: Printed for Her Majesty's Stationery Office, by Burgess & Son (Abingdon), Ltd.—1967.
Published at The Patent Office, 25 Southampton Buildings, London, W.C.2,
from which copies may be obtained.

1070409 COMPLETE SPECIFICATION
5 SHEETS This drawing is a reproduction of
the Original on a reduced scale
Sheet 1





1070409 COMPLETE SPECIFICATION
5 SHEETS This drawing is a reproduction of
the Original on a reduced scale
Sheets 2 & 3

Fig. 5.

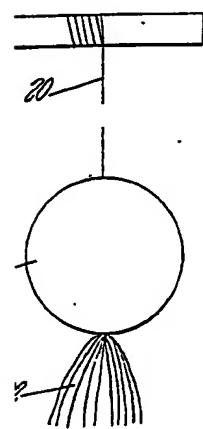


Fig. 6.

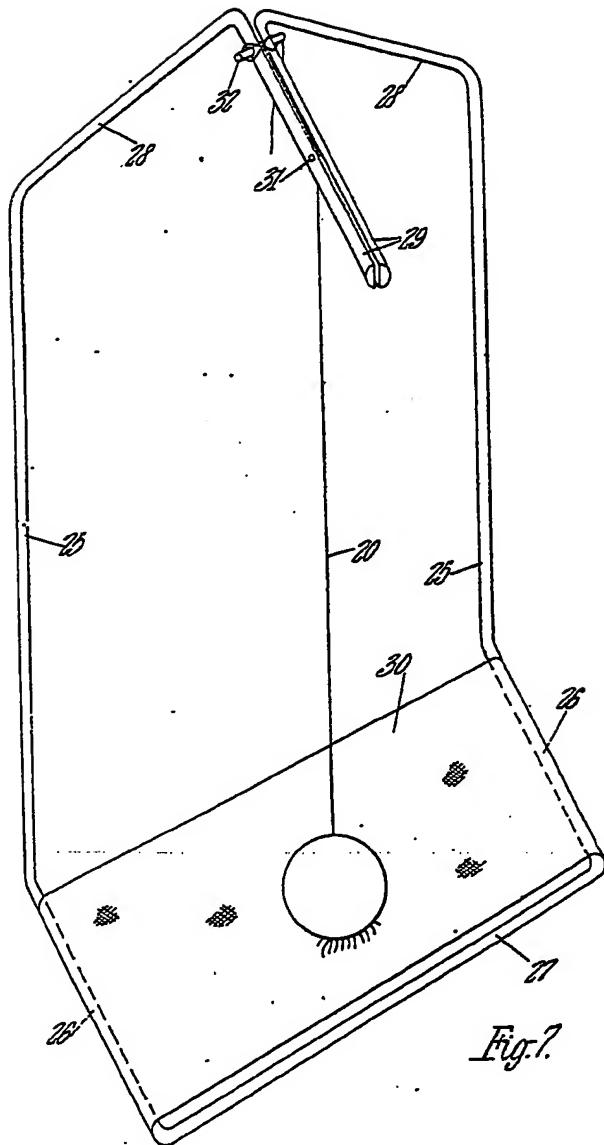
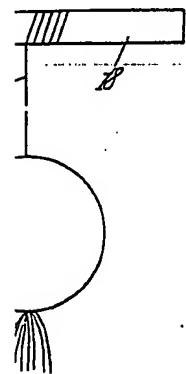
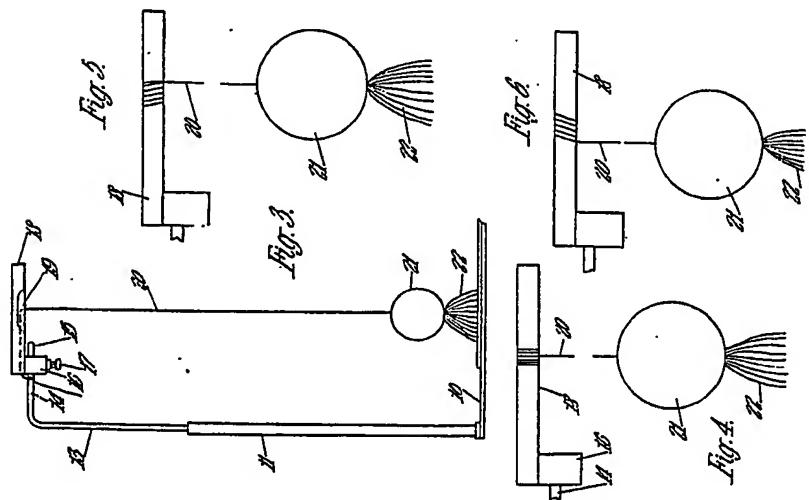
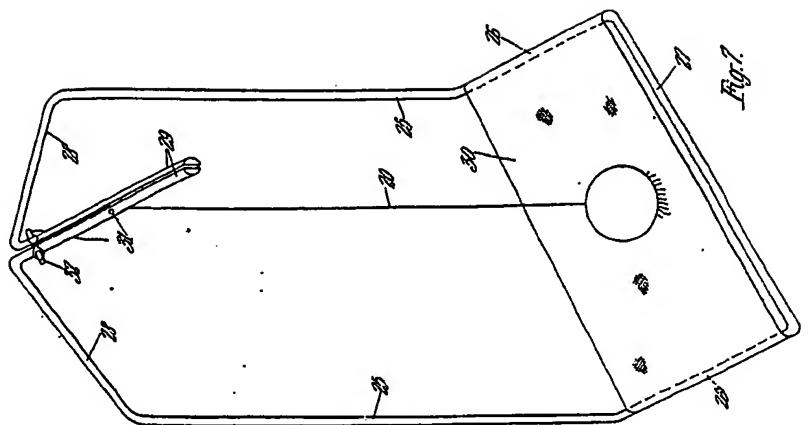


Fig. 7.

1070409 COMPLETE SPECIFICATION
5 SHEETS This drawing is a reproduction of
the Original on a reduced scale
Sheets 2 & 3



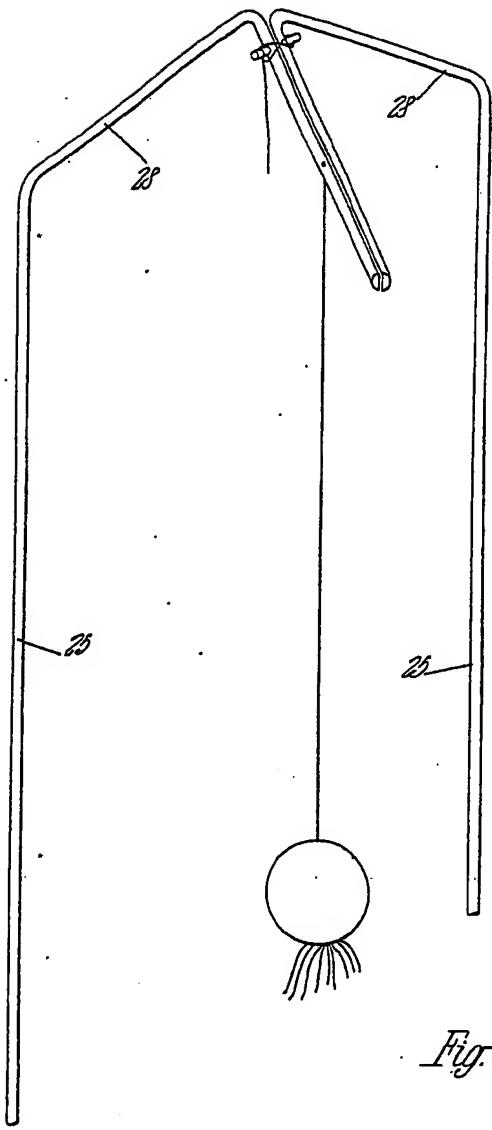


Fig. 8.

107049 COMPLETE SPECIFICATION
5 SHEETS This drawing is a reproduction of
the Original on a reduced scale
Sheets 4 & 5

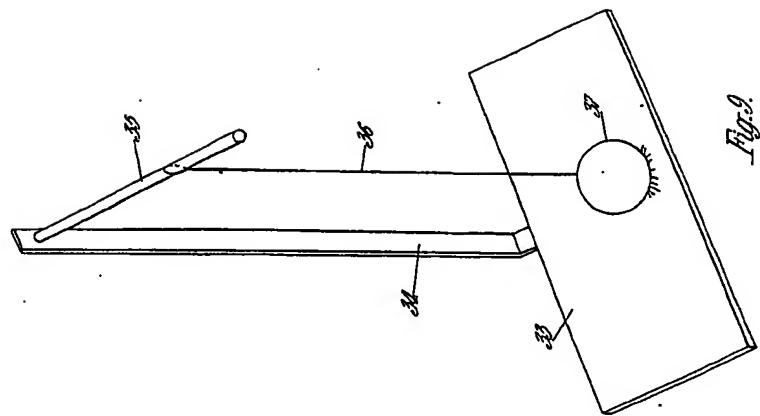


Fig.9

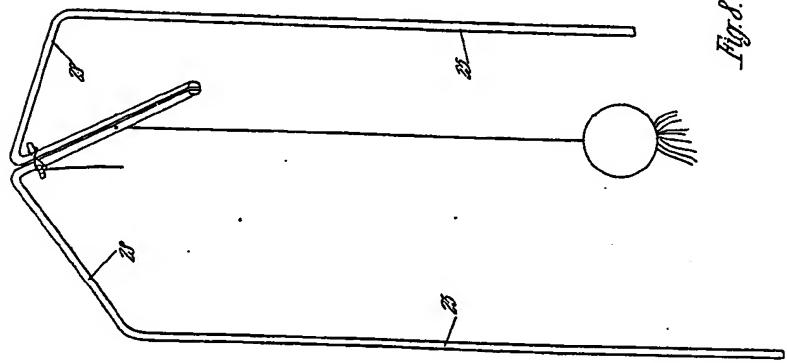
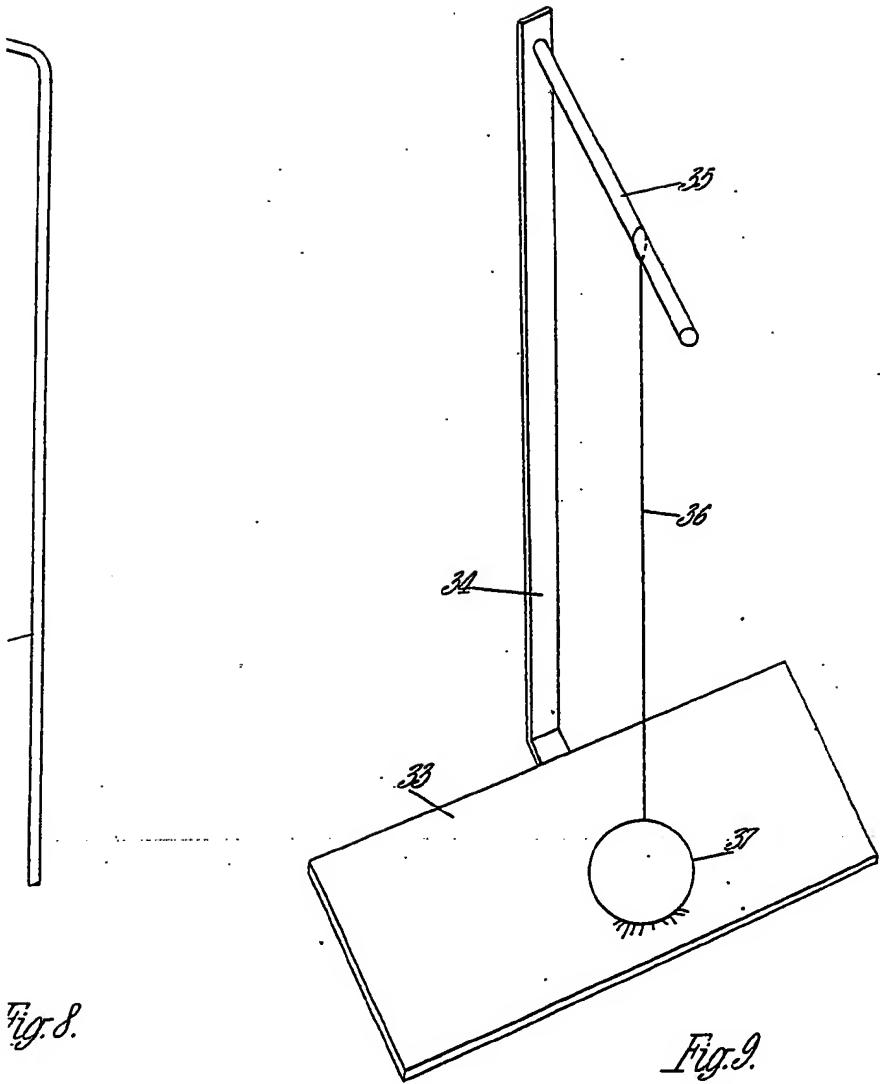


Fig.4

1070409 COMPLETE SPECIFICATION
5 SHEETS This drawing is a reproduction of
the Original on a reduced scale
Sheets 4 & 5



**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

BLACK BORDERS

IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

FADED TEXT OR DRAWING

BLURRED OR ILLEGIBLE TEXT OR DRAWING

SKEWED/SLANTED IMAGES

COLOR OR BLACK AND WHITE PHOTOGRAPHS

GRAY SCALE DOCUMENTS

LINES OR MARKS ON ORIGINAL DOCUMENT

REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.